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AMENDMENTS TO THE CLAIMS

1. (Original) A method for producing enantioselectively allylated N-acylhydrazine represented by the following general formula (3):

wherein R⁰ represents an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or -COOR¹ (where R¹ represents a hydrocarbon group); R² represents an acyl group; R³ and R⁴ each represent a hydrogen atom, or one of R³ and R⁴ represents a hydrogen atom and the other represents a hydrocarbon group; R⁵ and R⁶ each independently represent a hydrogen atom or a hydrocarbon group; and R⁴ and R⁶ may together form an alkylene ring or a heterocycle, the method characterized by reacting, in the presence of chiral phosphine oxide, N-acylhydrazone represented by the following general formula (1):

$$N$$
 N
 N
 R^0
 H
 $[1]$

wherein R⁰ and R² are as defined above,

with an allylating reagent represented by the following general formula (2):

$$R^3 \xrightarrow{R^5} SiX_3 \qquad [2]$$

wherein R³, R⁴, R⁵, and R⁶ are as defined above; R⁴ and R⁶ may together form an alkylene ring or a heterocycle; and three Xs each represent a chlorine atom or a bromine atom, or two of the three Xs each represent a chlorine atom or a bromine atom and the other one represents an alkyl group.

2. (Original) The method according to claim 1, wherein R⁰ in the general formulas (1) and (3) is -C00R¹ (where R¹ represents a hydrocarbon group).

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3. (Previously presented) The method according to claim 1, wherein the chiral phosphine oxide is (R)- or (S)-2,2'-bis(diarylphosphino)-1,1'-binaphthyl dioxide represented by the following general formula (4):

wherein R²⁰ and R²¹ each independently represent a hydrogen atom, an alkyl group, an alkoxy group, or a halogen atom; and Ar represents an aryl group.

- 4. (Original) The method according to claim 3, wherein R²⁰ and R²¹ in the general formula (4) each represent a hydrogen atom.
- 5. (Previously presented) The method according to claim 3, wherein Ar in the general formula (4) is a phenyl group.
- 6. (Previously presented) The method according to claim 3, wherein Ar in the general formula (4) is a tolyl group.
- 7. (Previously presented) The method according to claim 1, further comprising adding phosphine as an additive to the reaction system.
- 8. (Original) The method according to claim 7, wherein the phosphine is trialkylphosphine, triarylphosphine, or alkyldiarylphosphine.

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- 9. (Previously presented) The method according to claim 1, wherein the allylating reagent represented by the general formula (2) is crothyltrichlorosilane.
- 10. (Previously presented) The method according to claim 1, wherein the allylating reagent represented by the general formula (2) is 2-methyl-2-butenyltrichlorosilane.
- 11. (Previously presented) The method according to claim 1, wherein the allylating reagent represented by the general formula (2) is allyltrichlorosilane.
- 12. (Previously presented) A method for producing alloisoleusine, which uses as a key reaction, the asymmetric allylation reaction according to the method of claim 1.